

FIG.1

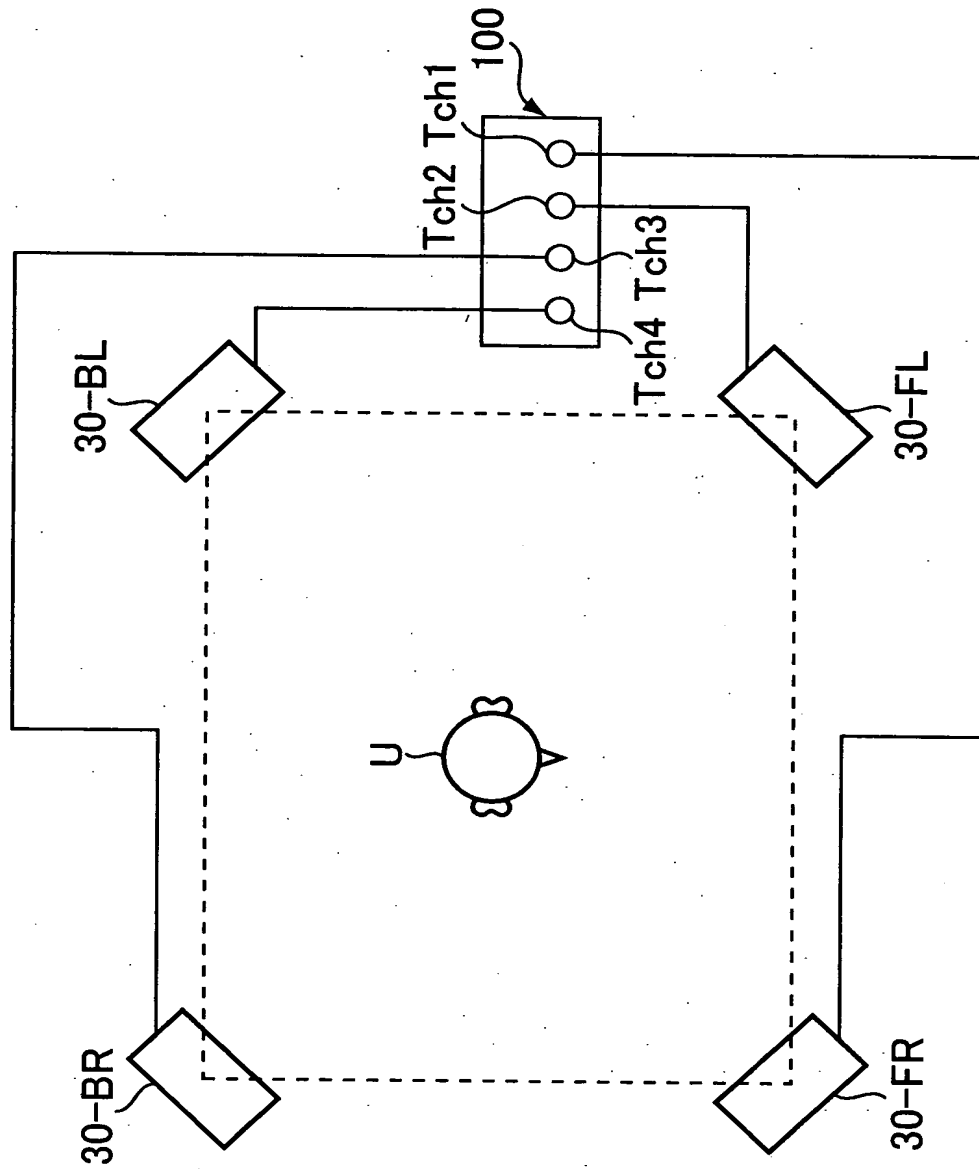


FIG.2

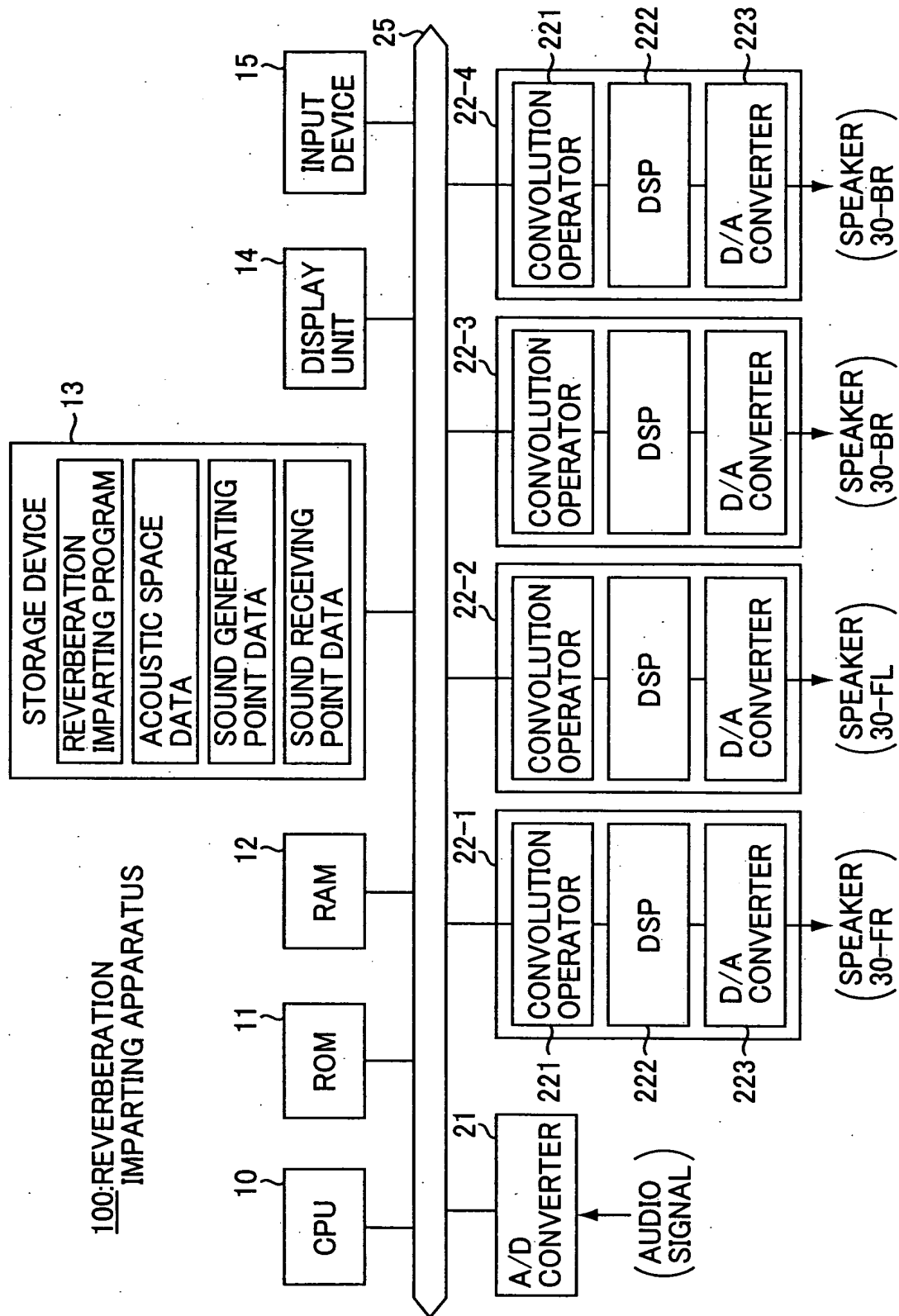


FIG.3 (a)

ACOUSTIC SPACE

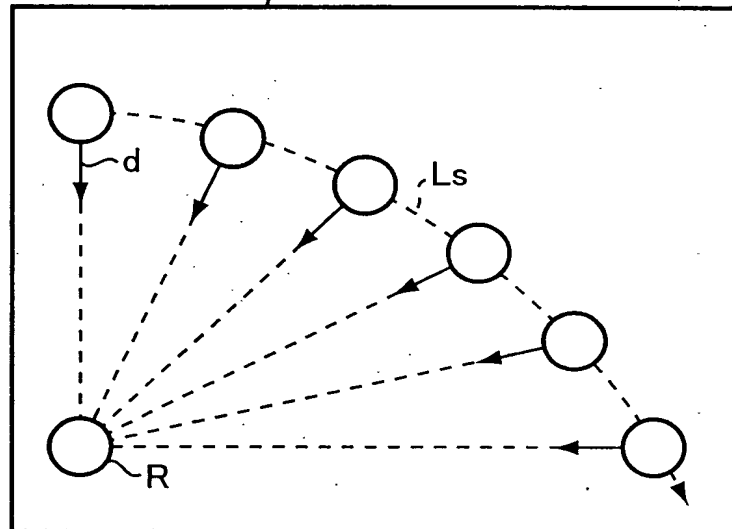


FIG.3 (b)

ACOUSTIC SPACE

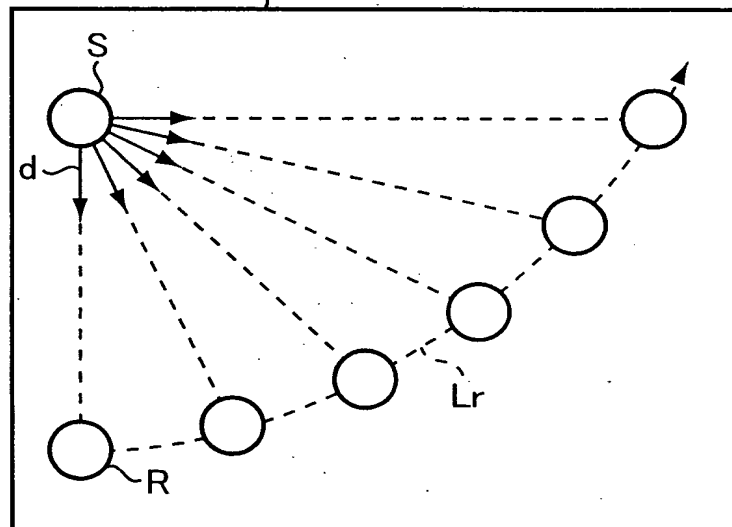


FIG.4 (a)

ACOUSTIC SPACE

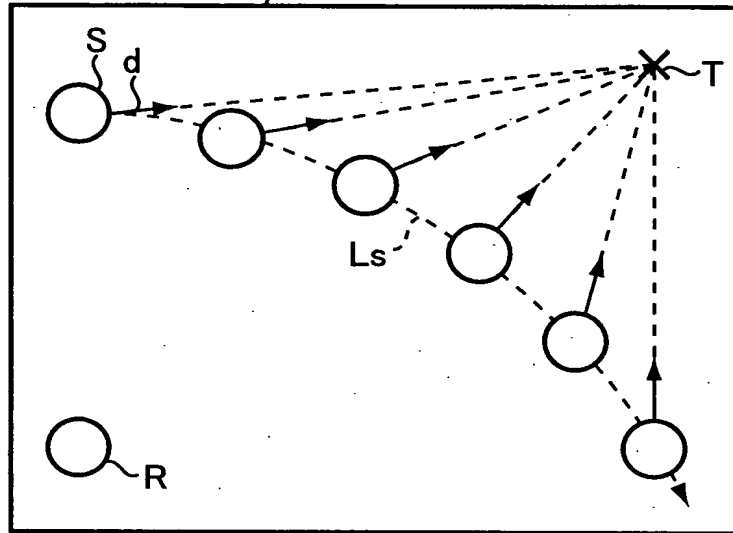


FIG.4 (b)

ACOUSTIC SPACE

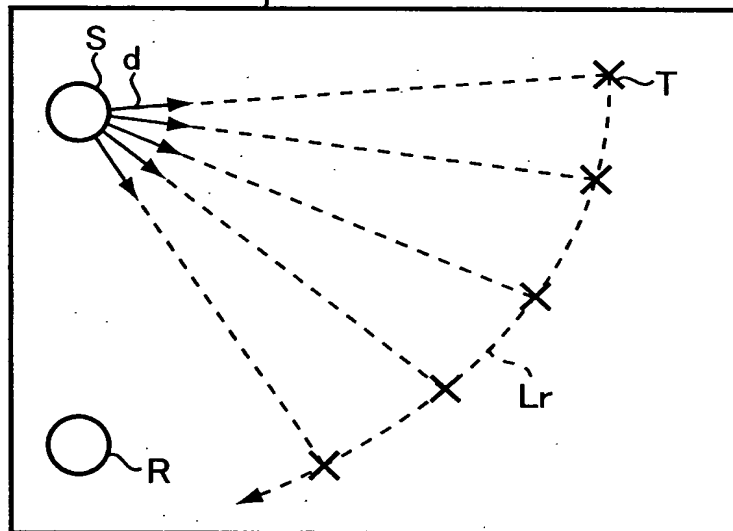


FIG.5

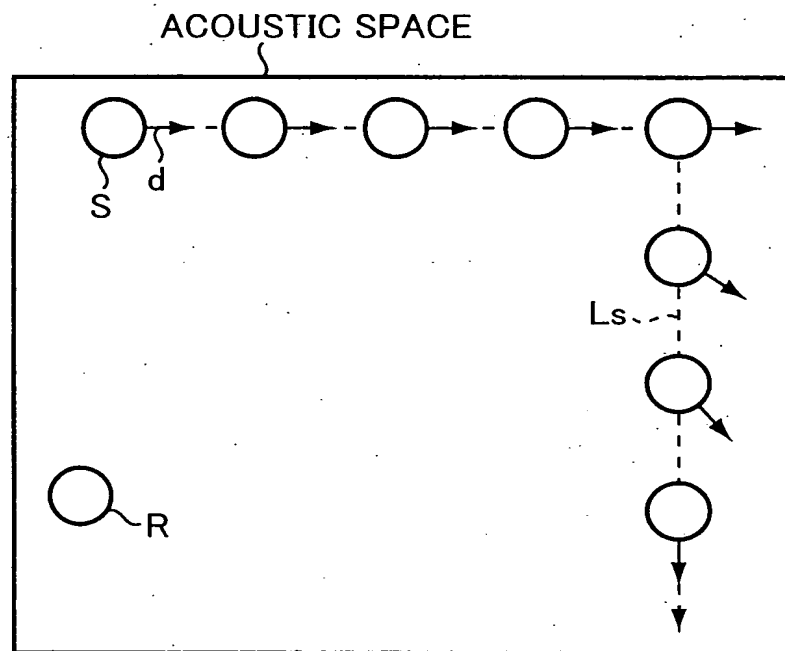


FIG.6

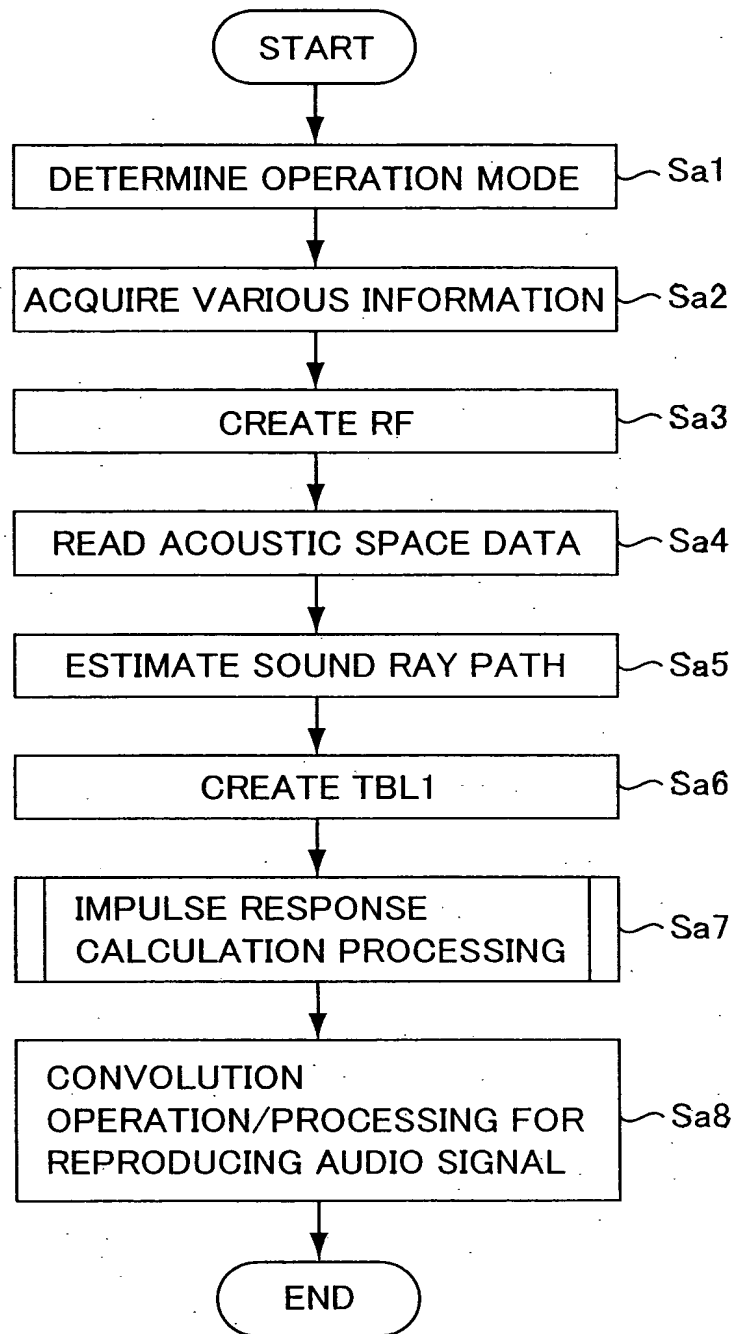


FIG.7

RF



| | |
|--|--|
| ACOUSTIC SPACE | XX CONCERT HALL |
| KIND OF SOUND GENERATING POINT | TRUMPET |
| POSITION OF SOUND GENERATING POINT | (X _s ,Y _s ,Z _s) |
| ORIENTATION OF SOUND GENERATING POINT | (X _{sd} ,Y _{sd} ,Z _{sd}) |
| KIND OF SOUND RECEIVING POINT | HUMAN BEING |
| POSITION OF SOUND RECEIVING POINT | (X _R ,Y _R ,Z _R) |
| ORIENTATION OF SOUND RECEIVING POINT | (X _{Rd} ,Y _{Rd} ,Z _{Rd}) |
| POSITION OF TARGET POINT | (X _T ,Y _T ,Z _T) |

FIG.8

TBL1

| SOUND RAY PATH LENGTH | EMITTING DIRECTION | REACHING DIRECTION | NUMBER OF REFLECTIONS | REFLECTION ATTENUATION RATE |
|--------------------------|-----------------------|-----------------------|--------------------------|--------------------------------|
| L1 | (Xr1,Yr1,Zr1) | (Xa1,Ya1,Za1) | 1 | d1 |
| L2 | (Xr2,Yr2,Zr2) | (Xa2,Ya2,Za2) | 2 | d2 |
| • • • | • • • | • • • | • • • | • • • |

FIG.9

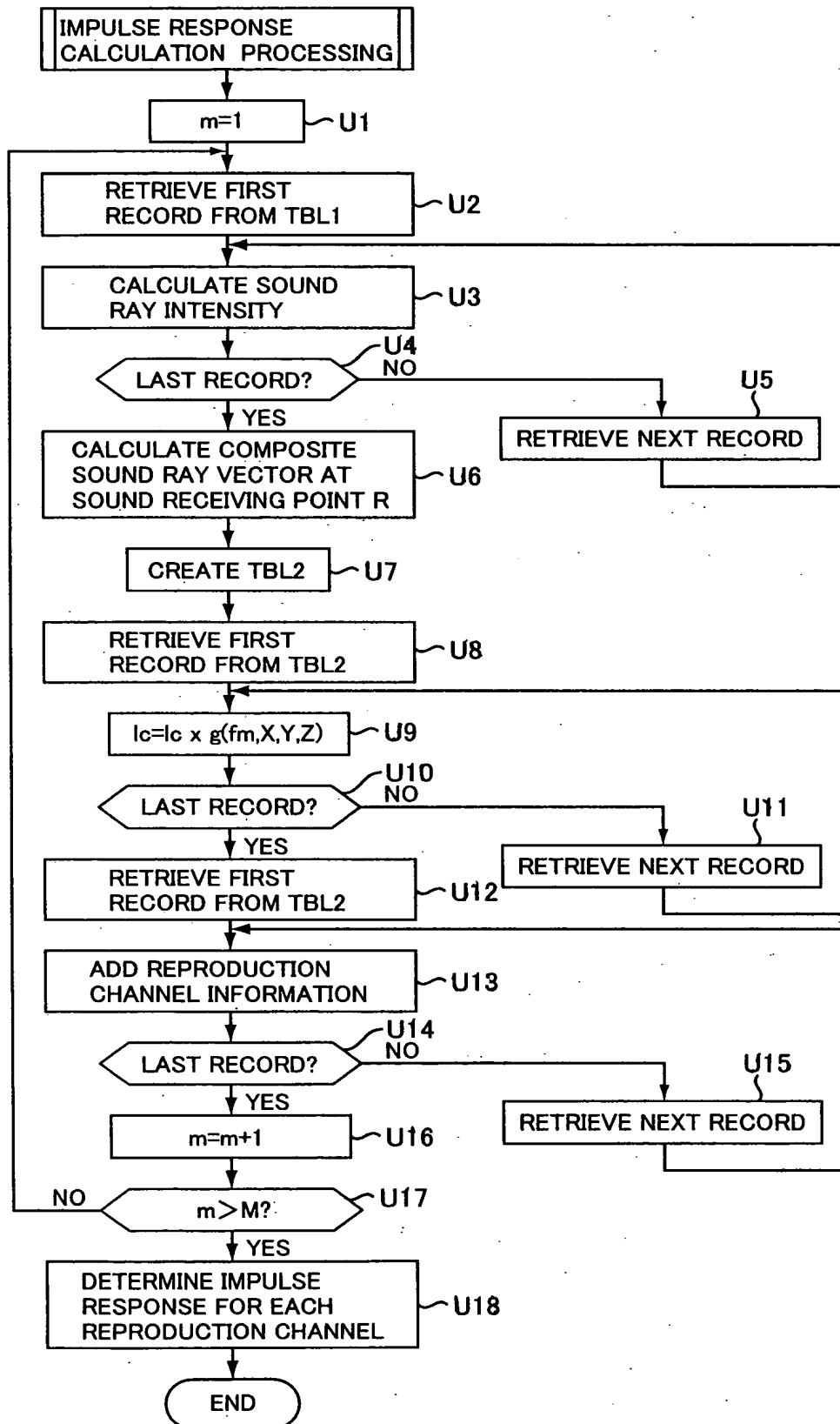


FIG.10

TBL2

| REVERBERATION DELAY TIME | COMPOSITE SOUND RAY INTENSITY | COMPOSITE REACHING DIRECTION |
|-----------------------------|-------------------------------------|------------------------------------|
| 3msec | I_{c1} | (X_{c1}, Y_{c1}, Z_{c1}) |
| 3.2msec | I_{c2} | (X_{c2}, Y_{c2}, Z_{c2}) |
| ⋮ | ⋮ | ⋮ |

FIG.11

TBL2

| REVERBERATION DELAY TIME | COMPOSITE SOUND RAY INTENSITY | COMPOSITE REACHING DIRECTION | REPRODUCTION CHANNEL INFORMATION |
|-----------------------------|-------------------------------------|------------------------------------|--|
| 3msec | I_{c1} | (X_{c1}, Y_{c1}, Z_{c1}) | REPRODUCTION CHANNEL [1] |
| 3.2msec | I_{c2} | (X_{c2}, Y_{c2}, Z_{c2}) | REPRODUCTION CHANNEL [3] |
| ⋮ | ⋮ | ⋮ | ⋮ |

FIG.12

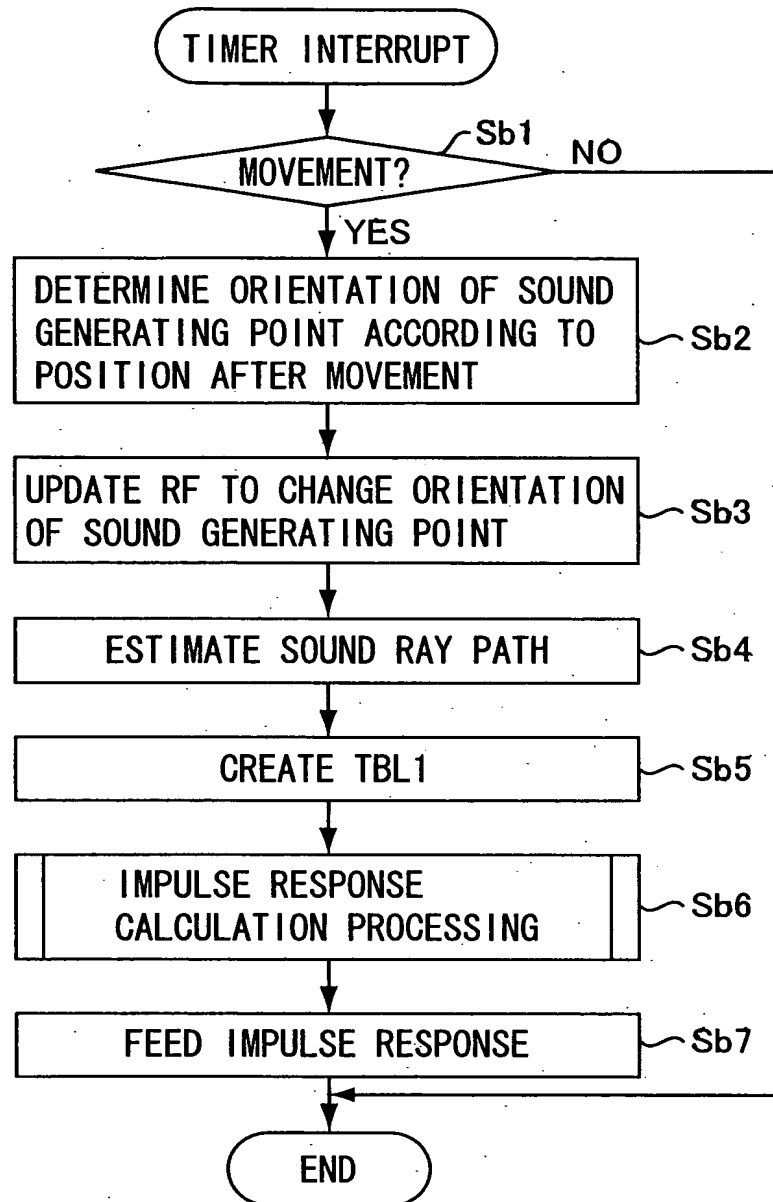


FIG.13

